Title (en)

ADAPTIVE RESHAPING FOR LAYERED CODING OF ENHANCED DYNAMIC RANGE SIGNALS

Title (de)

ADAPTIVE UMFORMUNG FÜR SCHICHTKODIERUNG VON SIGNALEN MIT ERWEITERTEM DYNAMIKBEREICH

Title (fr)

DÉFORMATION ADAPTATIVE POUR CODAGE PAR COUCHES DES SIGNAUX AVEC UNE PLAGE DYNAMIQUE AMÉLIORÉE

Publication

EP 3011741 B1 20180307 (EN)

Application

EP 14736245 A 20140616

Priority

- US 201361836044 P 20130617
- US 201461951914 P 20140312
- US 201462002631 P 20140523
- US 2014042583 W 20140616

Abstract (en)

[origin: WO2014204865A1] An encoder receives an input enhanced dynamic range (EDR) image to be coded in a layered representation. Input images may be gamma-coded or perceptually-coded using a bit-depth format not supported by one or more video encoders. The input image is remapped to one or more quantized layers to generate output code words suitable for compression using the available video encoders. Algorithms to determine optimum function parameters for linear and non-linear mapping functions are presented. Given a mapping function, the reverse mapping function may be transmitted to a decoder as a look-up table or it may be approximated using a piecewise polynomial approximation. A polynomial approximation technique for representing reverse-mapping functions and chromaticity translation schemes to reduce color shifts are also presented.

IPC 8 full level

H04N 19/186 (2014.01); **G06T 5/00** (2006.01); **G06T 5/50** (2006.01); **H04N 19/105** (2014.01); **H04N 19/126** (2014.01); **H04N 19/136** (2014.01); **H04N 19/192** (2014.01); **H04N 19/36** (2014.01); **H04N 19/46** (2014.01)

CPC (source: CN EP US)

H04N 19/126 (2014.11 - CN EP US); **H04N 19/136** (2014.11 - CN EP US); **H04N 19/176** (2014.11 - US); **H04N 19/182** (2014.11 - US); **H04N 19/186** (2014.11 - CN EP US); **H04N 19/192** (2014.11 - CN EP US); **H04N 19/36** (2014.11 - CN EP US); **H04N 19/46** (2014.11 - CN EP US); **H04N 19/85** (2014.11 - CN EP US); H04N 19/184 (2014.11 - US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2014204865 A1 20141224; CN 105324997 A 20160210; CN 105324997 B 20180629; CN 106488246 A 20170308; CN 106488246 B 20190611; EP 3011741 A1 20160427; EP 3011741 B1 20180307; HK 1217393 A1 20170106; JP 2016529741 A 20160923; JP 2017022737 A 20170126; JP 2017079471 A 20170427; JP 6038360 B2 20161207; JP 6181259 B2 20170816; JP 6312775 B2 20180418; US 2016134872 A1 20160512; US 2017085881 A1 20170323; US 9584811 B2 20170228; US 9716887 B2 20170725

DOCDB simple family (application)

US 2014042583 W 20140616; CN 201480034679 A 20140616; CN 201611156282 A 20140616; EP 14736245 A 20140616; HK 16105325 A 20160510; JP 2015563023 A 20140616; JP 2016169138 A 20160831; JP 2016213145 A 20161031; US 201414898574 A 20140616; US 201615370493 A 20161206